



US006009474A

United States Patent [19]

Lu et al.

[11] **Patent Number:** 6,009,474[45] **Date of Patent:** Dec. 28, 1999

[54] **METHOD AND APPARATUS FOR RE-ASSIGNING NETWORK ADDRESSES TO NETWORK SERVERS BY RE-CONFIGURING A CLIENT HOST CONNECTED THERETO**

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[21] **Appl. No.:** 08/857,625

[22] **Filed:** May 20, 1997

[51] **Int. Cl.:** G06F 13/00

[52] **U.S. Cl.:** 709/245; 709/220; 709/221; 709/222

[58] **Field of Search** 395/200.75, 200.51, 395/200.53, 200.54, 200.5, 200.56; 709/221, 223, 245, 224, 228; 340/825.52, 825.53; 370/471, 474, 475

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[57] **ABSTRACT**

The present invention provides a method and apparatus for re-assigning network addresses to a plurality of network servers by re-configuring a client host coupled to the network servers. According to the invention, when there are changes to network connections, the IP addresses (i.e., network addresses) of the individual network servers can be re-assigned automatically at the client host without powering off the network servers. According to the invention, in re-assigning a new network address to a port of the network server, a bootstrap protocol (BOOTP) request is first issued by the client host to the network server. The BOOTP request is received by the network server which then sends a BOOTP response to the client host to request a new network address. After the client host receives the BOOTP response, it sends a BOOTP reply to the network server. The BOOTP reply includes a new network address for the port of the network server. The above procedure is repeated for each port of the network server. Thus, each of the network server is re-assigned with a new network address. In this way, re-assignment of IP addresses of network servers is more efficiently performed. Furthermore, the work efforts are substantially reduced and are centralized.

23 Claims, 8 Drawing Sheets